

Title (en)

METHOD OF SCAVENGING MERCAPTANS FROM HYDROCARBONS

Title (de)

VERFAHREN ZUR ENTZIEHUNG VON MERCAPTANEN AUS KOHLENWASSERSTOFFEN

Title (fr)

PROCÉDÉ D'ÉPURATION DES MERCAPTANS PRÉSENTS DANS LES HYDROCARBURES

Publication

EP 2759587 A1 20140730 (EN)

Application

EP 14164453 A 20080306

Priority

- US 89562507 P 20070319
- US 4253608 A 20080305
- EP 08731506 A 20080306
- US 2008056006 W 20080306

Abstract (en)

Hydrogen sulfide and mercaptans in hydrocarbons, gas mixtures of hydrocarbons and the like may be scavenged therefrom by being brought into intimate contact with a mercaptan scavenger formulation of quaternary ammonium alkoxide or hydroxide in the presence of a high oxidative state metal such as cobalt, iron, chromium and/or nickel. The high oxidative state metal, being an oxidizer, acts as a catalyst when combined with the quaternary ethoxide or hydroxide for improved mercaptan scavenging performance.

IPC 8 full level

C10G 19/00 (2006.01)

CPC (source: EP US)

C10G 19/02 (2013.01 - EP US); **C10G 27/10** (2013.01 - EP US); **C10G 29/06** (2013.01 - EP US); **C10G 2300/1033** (2013.01 - EP US);
C10G 2300/1037 (2013.01 - EP US); **C10G 2300/202** (2013.01 - EP US); **C10G 2300/207** (2013.01 - EP US); **C10G 2300/80** (2013.01 - EP US)

Citation (applicant)

- US 4594147 A 19860610 - ROOF GLENN L [US], et al
- US 4867865 A 19890919 - ROOF GLEN L [US]
- US 5183560 A 19930202 - ROOF GLENN L [US], et al
- EP 0538819 A2 19930428 - BAKER HUGHES INC [US]
- US 5840177 A 19981124 - WEERS JERRY J [US], et al
- US 6013175 A 20000111 - WEERS JERRY J [US], et al

Citation (search report)

- [X] US 4929340 A 19900529 - POLLASTRINI SHEILA [US], et al
- [I] US 4923596 A 19900508 - BRICKER JEFFERY C [US], et al
- [I] US 5344555 A 19940906 - ROOF GLENN L [US], et al
- [I] US 4033860 A 19770705 - CARLSON DAVID H J
- [A] US 6124481 A 20000926 - HOLTON ROBERT A [US]
- [I] BASU B ET AL: "MEROX AND RELATED METAL PHTHALOCYANINE CATALYZED OXIDATION PROCESSES", CATALYSIS REVIEWS: SCIENCE AND ENGINEERING, MARCEL DEKKER INC. NEW YORK, US, vol. 35, no. 4, 1 December 1993 (1993-12-01), pages 571 - 609, XP000408832, ISSN: 0161-4940

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

DOCDB simple family (publication)

WO 2008115704 A1 20080925; EA 016758 B1 20120730; EA 200901177 A1 20100430; EP 2134814 A1 20091223; EP 2134814 A4 20130424;
EP 2759587 A1 20140730; EP 2759587 B1 20200212; US 2008230445 A1 20080925

DOCDB simple family (application)

US 2008056006 W 20080306; EA 200901177 A 20080306; EP 08731506 A 20080306; EP 14164453 A 20080306; US 4253608 A 20080305